

Facility Name: **U.S. Silica Company**

City: Millen

County: Jenkins

AIRS #: 04-13-165-00012

Application #: TV-736046

Date SIP Application Received: N/A

Date Title V Application Received: March 9, 2023

Permit No: 3295-165-0012-V-03-5

Program	Review Engineers	Review Managers
SSPP	S. Ganapathy	Hamid Yavari
SSCP	Tara Jones	Daniel Slade
ISMU	Joshua Pittman	Dan McCain
TOXICS	n/a	n/a
Permitting Program Manager		Stephen Damaske

Introduction

This narrative is being provided to assist the reader in understanding the content of the referenced SIP permit to construct and draft operating permit amendment. Complex issues and unusual items are explained in simpler terms and/or greater detail than is sometimes possible in the actual permit. This permit is being issued pursuant to: (1) Sections 391-3-1-.03(1) and 391-3-1-.03(10) of the Georgia Rules for Air Quality Control, (2) Part 70 of Chapter I of Title 40 of the Code of Federal Regulations, and (3) Title V of the Clean Air Act Amendments of 1990. The following narrative is designed to accompany the draft permit and is presented in the same general order as the permit. This narrative is intended only as an adjunct for the reviewer and has no legal standing. Any revisions made to the permit in response to comments received during the public comment period and EPA review process will be described in an addendum to this narrative.

I. Facility Description**A. Existing Permits**

Table 1 below lists the current Title V permit, and all administrative amendments, minor and significant modifications to that permit, and 502(b)(10) attachments.

Table 1: Current Title V Permit and Amendments

Permit/Amendment Number	Date of Issuance	Description
3295-165-0012-V-03-0	Feb. 13, 2019	Administrative Amendment (Name & Ownership Change)
3295-165-0012-V-03-1	March 6, 2019	Sig. Mod with construction remove previously permitted equipment that is either not needed or never installed. Add new equipment for the production of two new products.
3295-165-0012-V-03-2	Nov. 19, 2020	Minor modification with construction - adding a new crusher, feeder and surge hopper. Modifying existing conveyor and bucket elevator.
3295-165-0012-V-03-3	March 7, 2022	Minor modification with construction - Install and operate one raw material sand silo and associated conveying equipment to increase sand storage capacity
3295-165-0012-V-03-4	July 13, 2022	Minor modification with construction - Installation and operation of new truck loadout system consisting of three silos and associated conveying equipment and a baghouse for controlling PM emissions for cristobalite, and a Transloader with a conveyor and inherent dust control system.

B. Regulatory Status**1. PSD/NSR/RACT**

Currently the facility's potential emissions for all NSR-regulated pollutants is less than the major source threshold of 250 tpy. As such, the facility is a true minor with respect to PSD regulations.

2. Title V Major Source Status by Pollutant

Table 2: Title V Major Source Status

Pollutant	Is the Pollutant Emitted?	If emitted, what is the facility's Title V status for the Pollutant?		
		Major Source Status	Major Source Requesting SM Status	Non-Major Source Status
PM	✓			✓
PM ₁₀	✓			✓
PM _{2.5}	✓			✓
SO ₂	✓			✓
VOC	✓			✓
NO _x	✓	✓		
CO	✓	✓		
Individual HAP	✓	✓		
Total HAPs	✓	✓		

II. Proposed Modification**A. Description of Modification**

U.S. Silica is requesting to update the hydrogen fluoride (HF) emissions limit from Kiln No. 1 to reflect updated stack testing results. No equipment additions, modifications, or changes are necessary as a result of this request. The proposed emission limit increase will not impact maximum production, equipment, or other facility-wide potential or actual emissions.

EPD requested the Permittee consider the need to have a Toxic Impact Assessment (TIA) to reflect increase in HF in this amendment. The Permittee submitted the BACT analysis from Application #20615 the initial PSD application for the facility. This analysis includes a TIA that was conducted with 8.66 lb/hr HF emissions from each of four kilns. The previous TIA showed compliance with all applicable short term and long term Acceptable Ambient Concentrations (AAC) for HF. This application requests a 2.8 lb/hr HF rate for kiln 1 is ~8% of the total emission rate from the initial TIA. Therefore, a new TIA for the proposed permit amendment is not needed.

EPD reviewed the past HF modeling data and agreed with the Permittees/consultants conclusion. Therefore, it was determined no Toxic Impact Assessment was necessary for this proposed permit amendment.

B. Emissions Change

There will be no change in the facility-wide potential or actual emissions. There is no change in maximum production from the facility.

C. PSD/NSR Applicability

The proposed modification is not subject to new source review under PSD since the increase in emission is less than significant emission increase for all PSD pollutants.

III. Facility Wide Requirements

Not applicable.

IV. Regulated Equipment Requirements

A. Brief Process Description

There is no change to existing processes currently in operation at the facility.

B. Equipment List for the Process

No changes to currently permitted equipment at the facility. No new equipment is being added or existing equipment removed from the facility.

C. Equipment & Rule Applicability

The facility will not be subject to any new applicable rules due to an increase in the HF emission limit.

Emission and Operating Caps –

The Hydrogen Fluoride (HF) emission limit from Kiln No. 1 is being increased from the current limit based on the latest source test. This increase will not result in any change in the major source status of the facility with respect to HAPs emissions. The facility is already a major source of HAP emissions.

D. Permit Conditions

Condition 3.3.12 is amended to increase the hourly HF emission rate from the Kiln 1 to 2.8 lb/hr and annual HF emission limit from the kiln to 12.4 tons/year.

V. Testing Requirements (with Associated Record Keeping and Reporting)

There is no change to current testing conditions in the permit.

VI. Monitoring Requirements (with Associated Record Keeping and Reporting)

There is no change to current monitoring requirements/conditions in the permit.

VII. Other Record Keeping and Reporting Requirements

Exceedance – Condition 6.1.7.b. vii. is amended by changing the HF limit to 12.26 tpy.

Condition 6.2.13 is amended to change the HF reporting limit to 12.26 tpy.

VIII. Specific Requirements

Discuss any of the following specific requirements as they apply to the modification.

A. Operational Flexibility

Not applicable.

B. Alternative Requirements

Not applicable.

C. Insignificant Activities

No insignificant activities are added as part of this major modification.

D. Temporary Sources

Not applicable.

E. Short-Term Activities

No short term activities were included in the modification.

F. Compliance Schedule/Progress Reports

Not applicable.

G. Emissions Trading

Not applicable.

H. Acid Rain Requirements/CAIR/CSPAR

Not applicable.

I. Prevention of Accidental Releases

Not applicable.

J. Stratospheric Ozone Protection Requirements

Not applicable.

K. Pollution Prevention

Not applicable.

L. Specific Conditions

Not applicable.

Addendum to Narrative

The 30-day public review started on month day, year and ended on month day, year. Comments were/were not received by the Division.

//If comments were received, state the commenter, the date the comments were received in the above paragraph. All explanations of any changes should be addressed below.//